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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,462	11/21/2000	Robert D. Oden	US 1233/00	8342

7590 03/02/2004

Law Office-Dinesh Agarwal PC
5350 Shawnee Road
Suite 330
Alexandria, VA 22312

EXAMINER

JUNG, MIN

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,462

Applicant(s)

ODEN, ROBERT D.

Examiner

Min Jung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 10 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7-9 and 11-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheinbart et al., US 6,601,150 (Scheinbart).

Scheinbart discloses a memory management technique for maintaining packet order in a packet processing system. Regarding claims 1, 6, and 10, Scheinbart teaches a system, method, and a network processor for processing multiple incoming packets of data and outgoing packets in a data processing system, the system comprising: means for inputting each of the incoming data packets in a specific order and means for assigning an ordering pointer to each of the packets of data, the ordering pointers being stored in an ordering buffer (write pointer and read pointer stored and maintained by the FIFO manager 716, col. 5, lines 52-63, col. 3, lines 25-26, lines 37-38, lines 44-45, and lines 55-56); means for processing the incoming packets of data (packet processor 724, col. 5, lines 15-16); means for setting a completion flag upon completion of processing of the associated incoming packet (setting VALID indicator, col. 5, lines 18-21, and col. 8 lines 5-8), and the completion flag is stored in the ordering buffer with the ordering pointer associated with the incoming packet (see Figs. 1-6); and means for outputting

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the processed data packets after the associated completion flags have been set (col. 8, lines 22-33), the means for outputting being responsive to the ordering pointers associated with the incoming data packets so that the specific order of the incoming packets is maintained. Specifically, at col. 5, lines 52-63, Scheinbart captures all the essence of the present invention by stating that 'the FIFO manager 716 coordinates access to the Packet Memory 718 in order to allow packets to be written into the Packet Memory 718 by the Packet Writer 706 in FIFO order, processed by the Packet Processor 724 in an order-independent fashion, and read from the Packet Memory 718 by the Packet Reader 708 in FIFO order'. Further regarding the "multi-processor data processing system" recited in the preamble of claims 1 and 6, Scheinbart teaches a processor capable of processing up to 32 packets at a time, at col. 7, line 66 – col. 8, line 4. From this teaching, it is inherent that there are multiple processing components, which work in parallel to one another, and therefore, reads on the "multi-processor" limitation. Therefore, the processor of Scheinbart, which is capable of multiple parallel processing of multiple packets, read on the "multi-processor" of the present invention.

Even if "multi-processors" were to be interpreted as a multiple number of physically separated processors, the means and the steps recited in the body of claims are not tied to such limitation and do not call for any functions which would require a multiple number of processors. Thus, meaningful weight has not been given to the term "multi-processor". Therefore, even with such interpretation, Scheinbart meets all the claim limitations.

Allowable Subject Matter

3. Claims 2-5, 7-9, and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: Scheinbart, while teaching all the limitations of claims 1, 6, and 10, fails to teach or fairly suggest the features of assigning a plurality of sequence numbers defining a sequential order, and the incoming packets being assigned a sequence number in the sequence order according to the order of input from an incoming queue, and each of the sequence numbers providing an index to the location of the associated ordering pointer in the ordering buffer.

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Laor et al. patent, the Wang et al. patent, the Crocker et al. patent, the Wolrich et al. patent, the Koodli patent, the Blaauw et al. patent, the Opsasnick et al. patent, and the Harriman et al. patent are cited for further references.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 703-305-4363. The examiner can normally be reached on Monday-Friday, 7AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJ
February 26, 2004


Min Jung
Primary Examiner